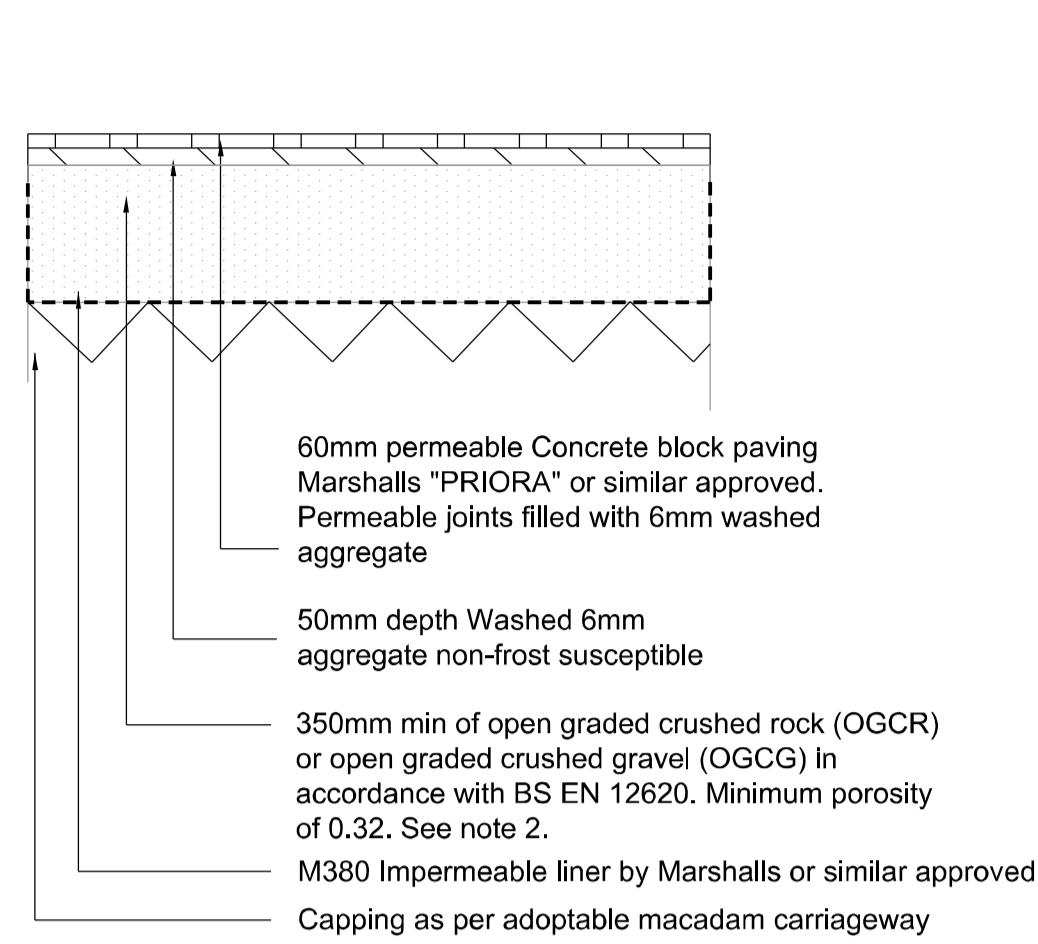


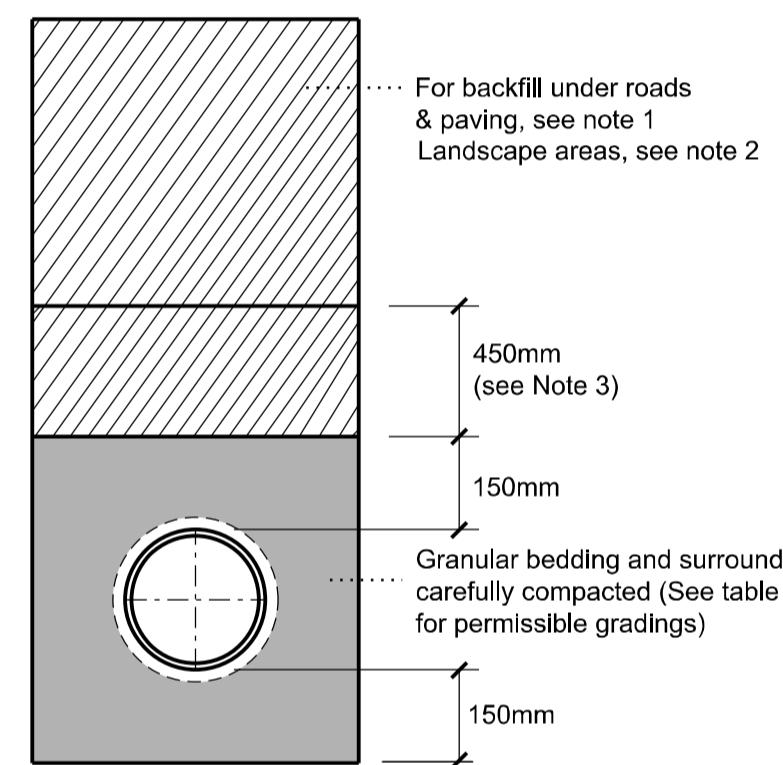
TYPICAL MANHOLE DETAIL TYPE 2

(Maximum depth from cover level to soffit of pipe 3m)

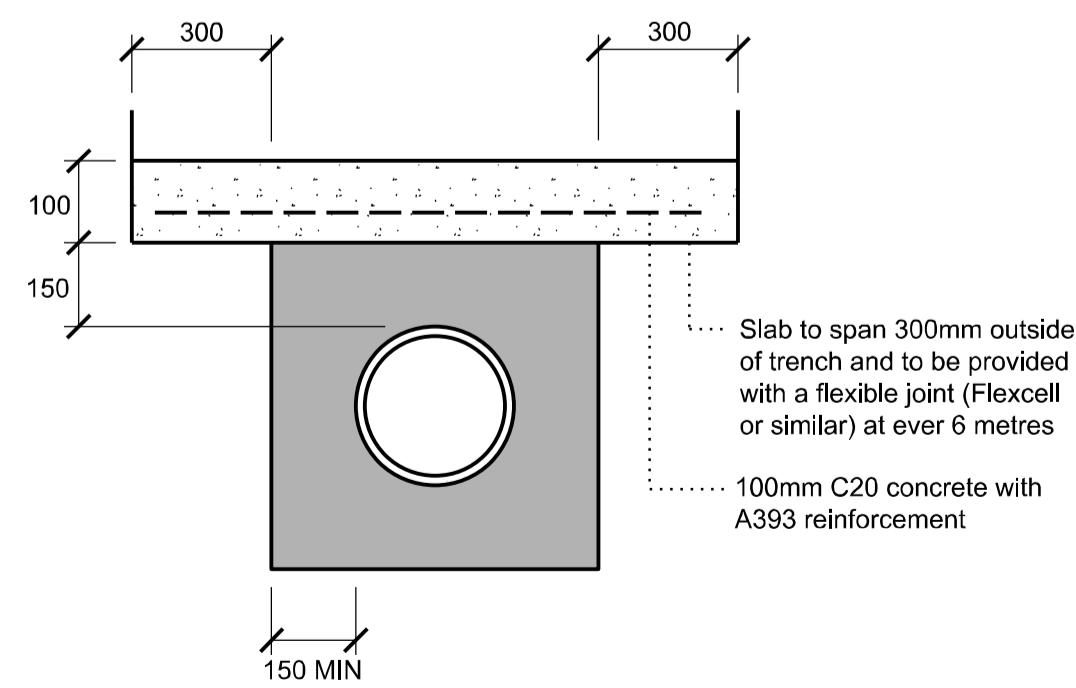


1. Private drive blockwork colour to be natural.
2. See engineering layout for area specific stone depth/ levels.

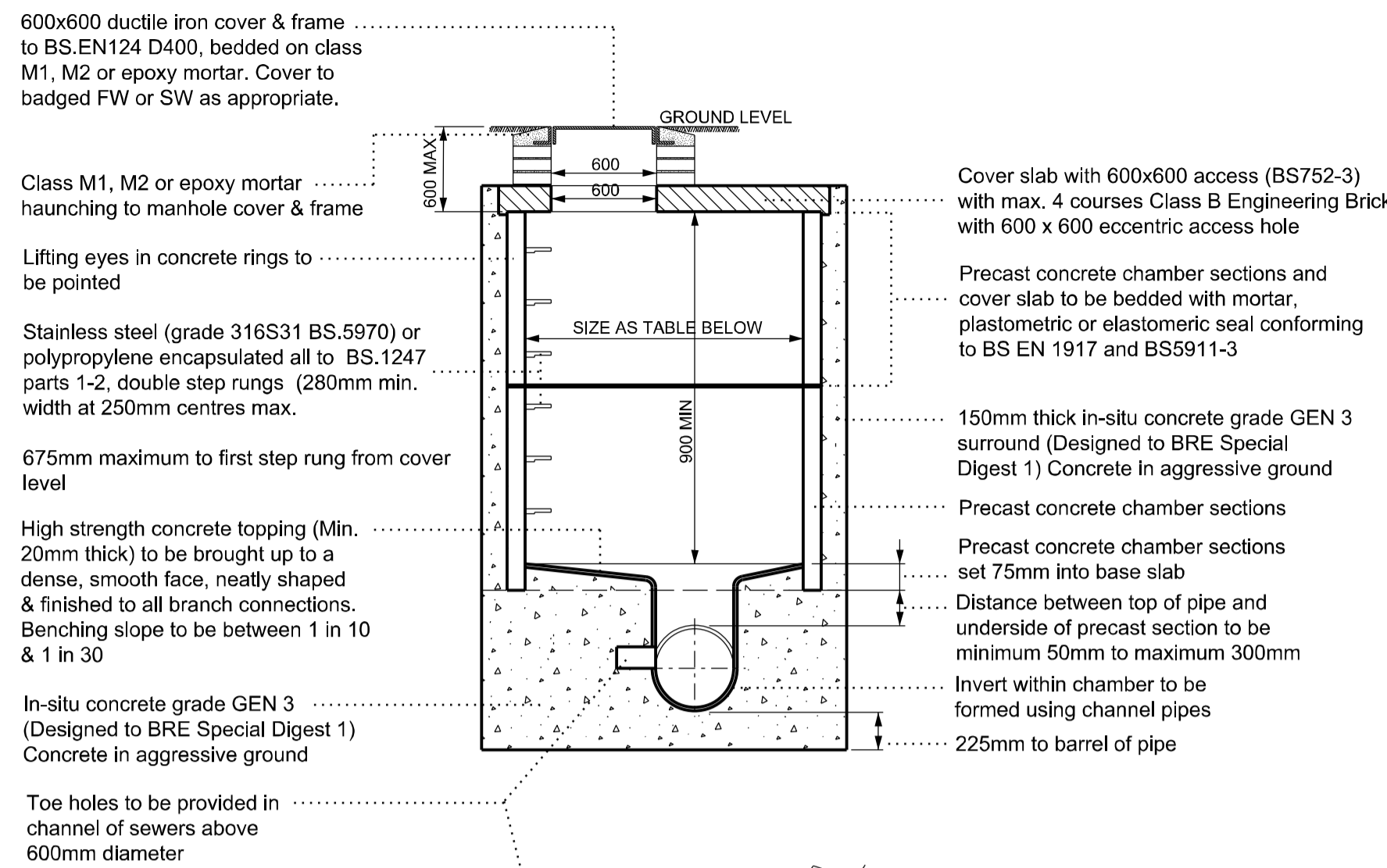
PRIVATE POROUS BLOCK PAVING DETAIL



CLASS S BEDDING DETAIL
(Rigid Pipes)

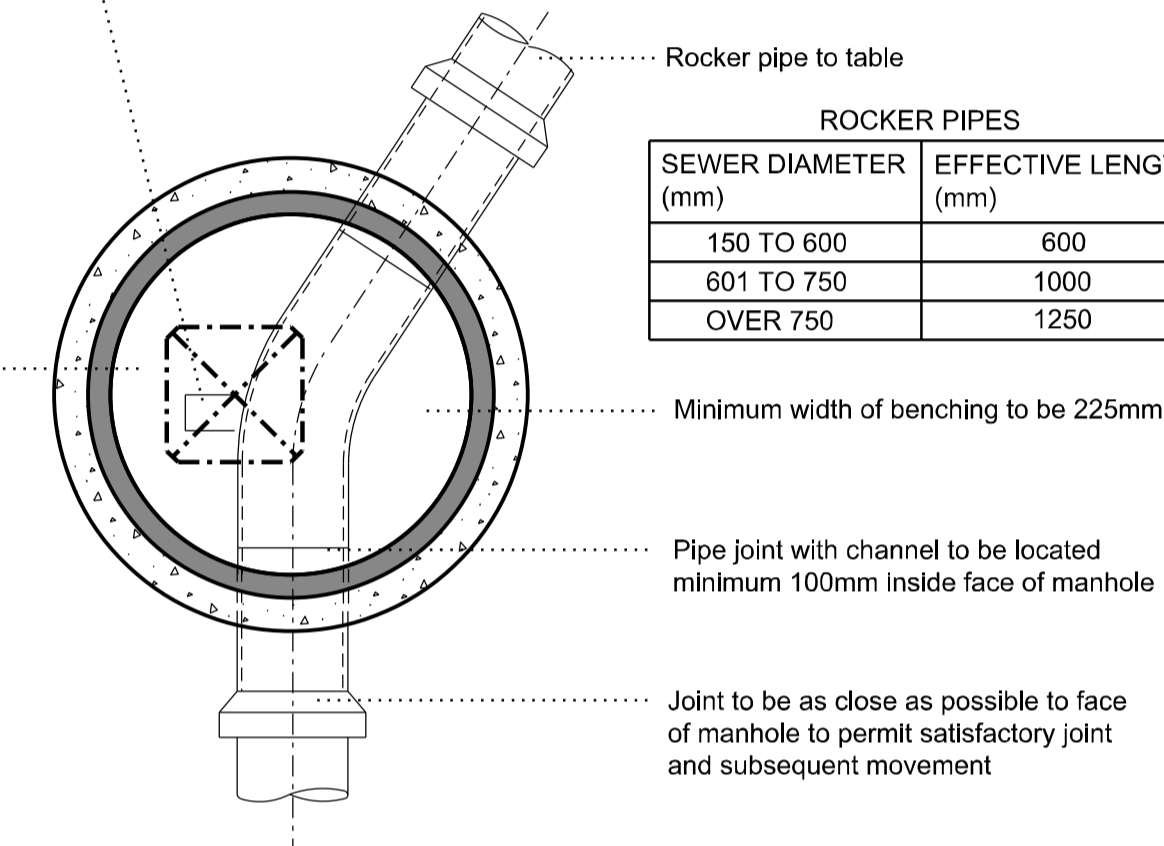


CONCRETE PROTECTION



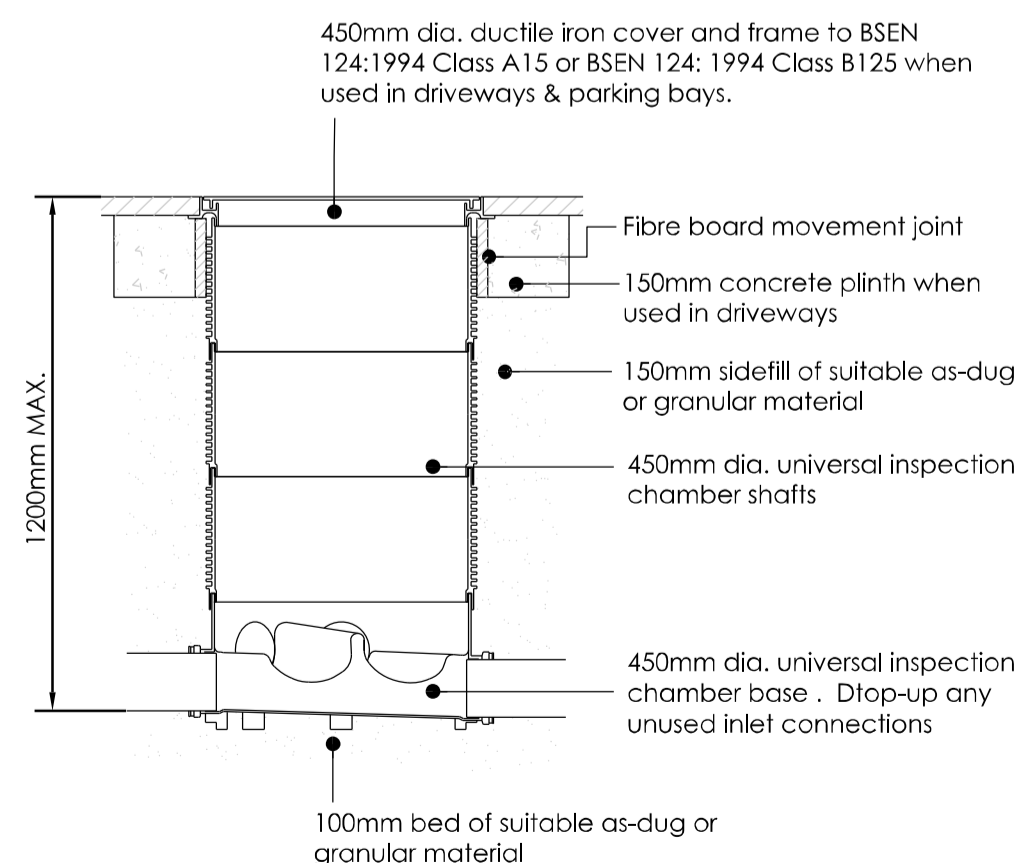
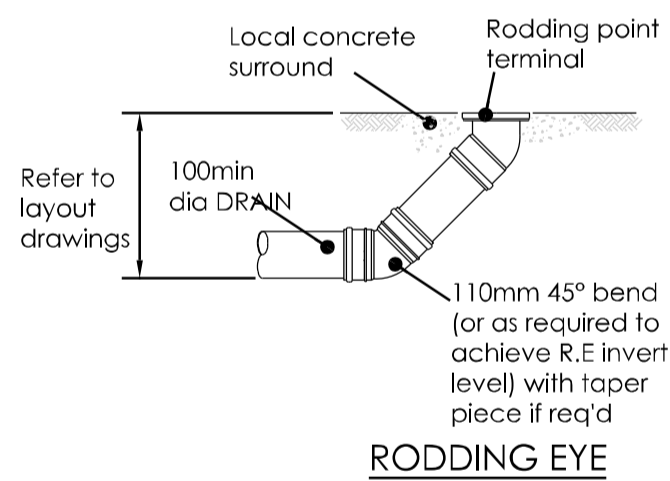
CHAMBER DIAMETERS

DIA. OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 TO 700	1500
750 TO 900	1800



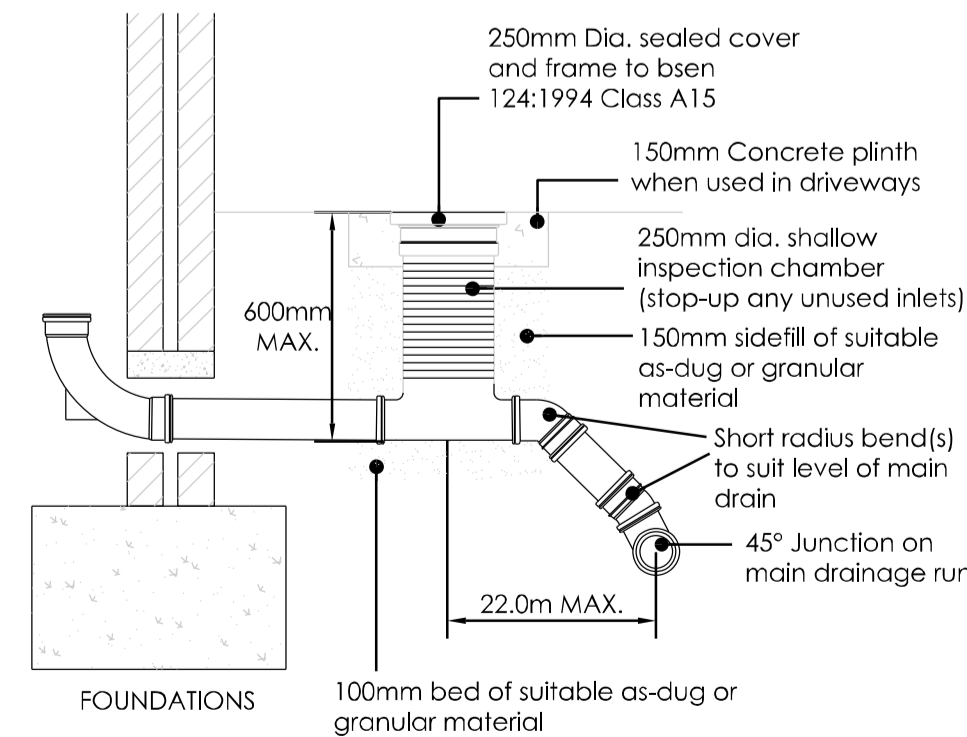
ROCKER PIPES

SEWER DIAMETER (mm)	EFFECTIVE LENGTH (mm)
150 TO 600	600
601 TO 750	1000
OVER 750	1250



TYPICAL INSPECTION CHAMBER

For use in soft areas, driveways and parking bays only

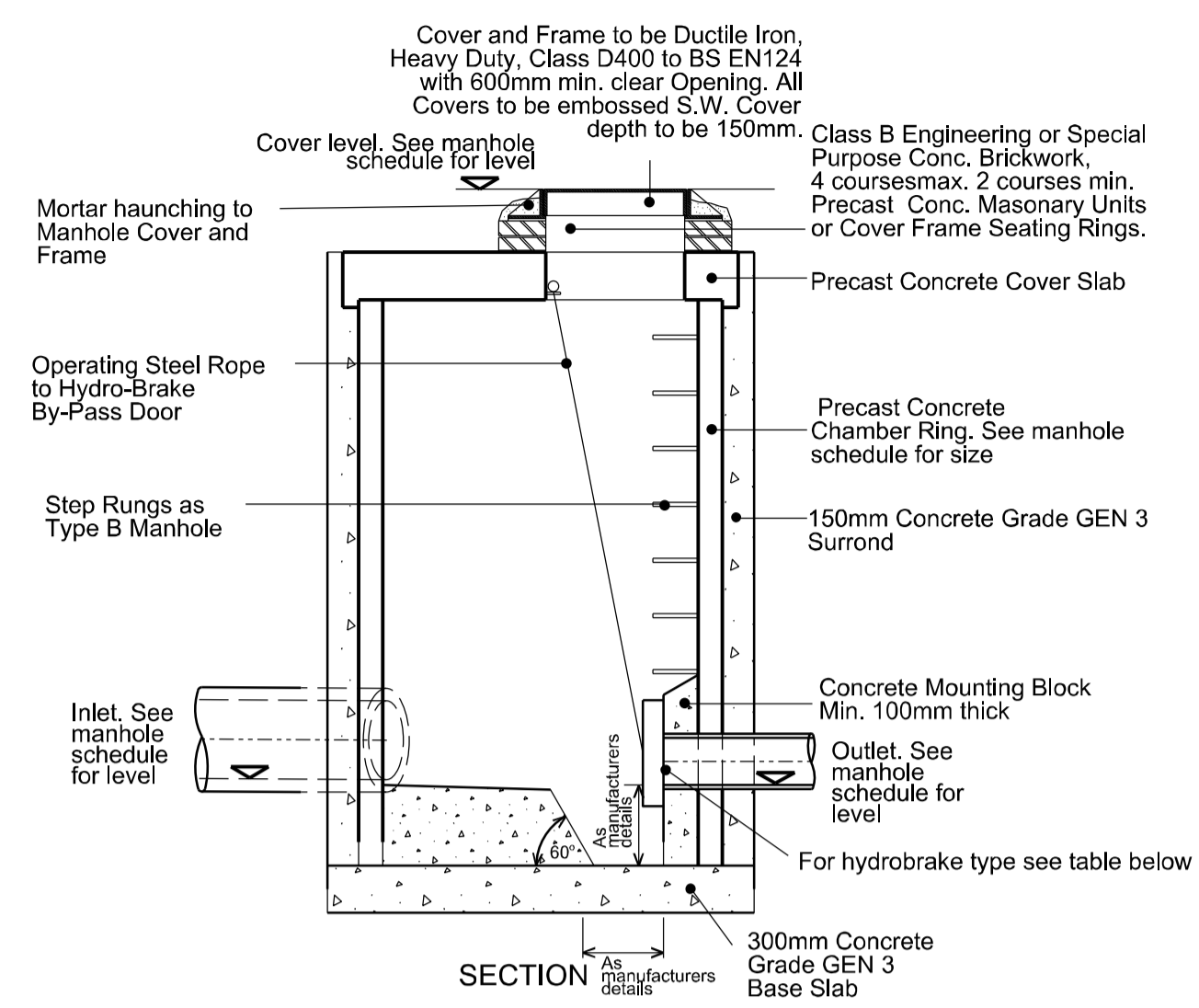


SHALLOW INSPECTION CHAMBER

For use in soft areas & driveways only

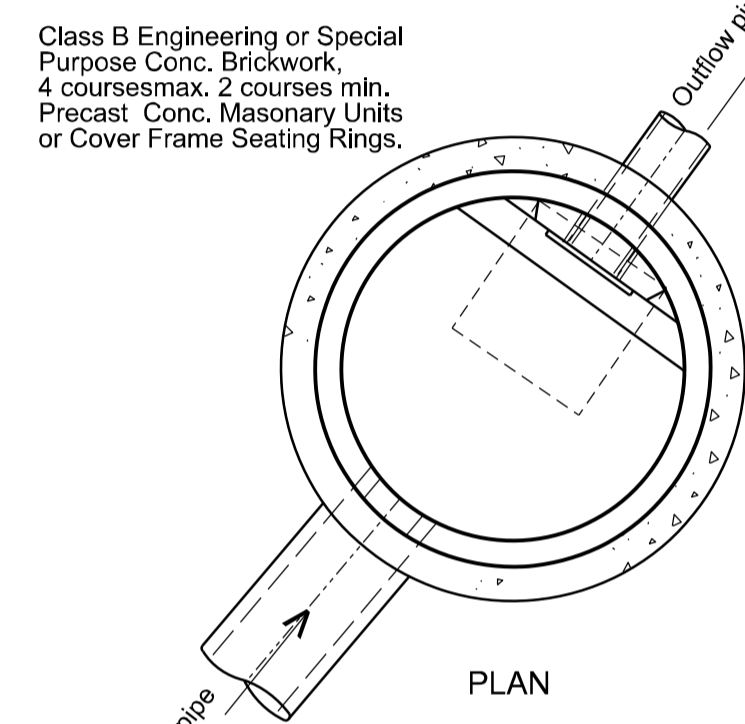
TYPICAL FLOW CONTROL CHAMBER DETAIL

INDIVIDUAL FLOW CONTROL CHAMBER DETAILS
SUBJECT TO STRUCTURAL ENGINEERS DESIGNS.



Manhole Ref	Orifice size
S100	46mm
S101	30mm

Note orifices below 50mm are to have a trash cage installed around to reduce chance of blockage



INDIVIDUAL WEIR WALLS AND COVER SLABS SUBJECT TO DESIGN BY STRUCTURAL ENGINEER

Notes.

1. Backfilling under roads and paving: Backfill from top of granular bedding up to formation level with Granular Subbase Material Type 1 to Highways Agency specification for Highway Works 1998 Clause 803, laid and compacted in 150mm layers.
2. Backfilling under landscaped areas: Backfill from top of granular bedding up to underside of topsoil with selected Class 1B material. Class 1B fill whether selected from locally excavated material or imported, shall consist of uniform readily compactable material, free from vegetable matter, building rubbish and frozen material, or materials susceptible to spontaneous combustion, and excluding clay of liquid limit greater than 80 and/or plastic limit greater than 55 and materials of excessively high moisture content. Clay lumps and stones retained on 75mm and 37.5mm sieves respectively shall be excluded from the fill material. Laid and compacted in layers not exceeding 300mm.
3. Do not use heavy compactors before there is 600mm of material over pipe.

Table - Granular bedding and sidefill materials for rigid pipes

Pipe Nominal Bore (DN)	Maximum Particle Size (mm)	Class of Bedding	Suitable materials	
			Imported granular materials (Note a)	Maximum CF value for as-dug granular material (Note b)
100	10	S	10mm nominal single-size	0.15
		B		0.30 (Note c)
		F		0.15
		N		0.15
Over 100 to 150	15	S	14mm to 5mm graded	0.15
		B		0.30 (Note c)
		F		0.15
		N		0.15
Over 150 to 500	20	S	14mm to 5mm graded or 20mm to 5mm graded	0.15
		B		0.30 (Note c)
		F		0.15
		N		0.15
Over 500 (Note d)	40	S	14mm to 5mm graded or 20mm to 5mm graded or 40mm to 5mm graded	0.15
		B		0.30 (Note c)
		F		0.15
		N		0.15

Notes

- (a) Imported granular materials to include aggregates to BS 882, air-cooled blast furnace slag to BS 1047 and sintered pulverized-fuel ash to BS 3797
- (b) The higher the CF value for as dug bedding and sidefill materials the greater the required effort for adequate compaction.
- (c) Angular materials should be chosen to ensure sufficient support is provided to these heavier pipes. Crushed rock aggregates to BS 882 are recommended. Air-cooled blast furnace slag to BS 3797 or other granular materials may be used if they show a similar degree of angularity

Revision	Description	Drawn	Checked	Date
	Preliminary			
	Information			
	Tender			
	Construction			
	As Built			

Woods Hardwick
Architects, Engineers and Development Consultants

Title: UPPER HEYFORD PARCEL B6

Details: TYPICAL DRAINAGE DETAILS

Scale: N.T.S @ A1 Date: OCTOBER 2016 Drawn: CG Chk: AT

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